Friday's Feature
By
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Spider mites

Several consecutive weeks of hot dry weather have created perfect conditions for spider mite infestations. Spider mites are among the most common pests which attack ornamental plants in Florida, including house plants and vegetables.

Spider mites are not truly insects. They have eight legs instead of six which makes them more closely related to spiders and ticks. Spider mites are very small, usually less than 1/50 inch in length, and are difficult to see with the unaided eye.

While there are some species of beneficial mites, several species are pests on a wide range of ornamental plants including African violets, azalea, camellia, chrysanthemum, citrus, eleagnus, holly, ligustrum, pyracantha, orchid, rose and viburnum as well as others. Mites can also be a problem on junipers and other needle-bearing evergreens.

Spider mite damage is usually not noticed until the problem is severe. Mites injure plants by tearing into the plant tissue and sucking up the resulting plant sap. This results in tiny areas of dead tissue, with most feeding occurring on the undersides of leaves. Light infestations appear as yellow or gray stippled patterns on the leaves. Heavy infestations can cause the leaves to turn yellow, gray or brownish and eventually drop off. Webbing may be spun over the entire branch or in the case of small plants, over the entire plant.

Spider mite webbing

If you suspect that a plant may have spider mites, pull out the magnifying glass and examine the undersides of the leaves for these eight-legged pests. If you don't have a magnifying glass, then shake or lightly beat the foliage on a sheet of white paper. If you see tiny dots moving about on the paper, it is most likely spider mites. Mite species range in color from virtually colorless to bright red.

While spider mite outbreaks occur naturally, especially on susceptible plant species when favorable environmental conditions exist, gardeners can actually do things to make the infestations worse. Spraying with certain insecticides can actually flare, or trigger, mite outbreaks. Repeated sprays of insecticides often kill off the beneficial insects and beneficial mites that keep the plant-feeding mite

population in check. Carbaryl (Sevin) and acephate are examples of insecticides that can cause an increase in the spider mite population.

There are many mite management or control strategies. First, it is important to keep your plants properly fertilized and watered. Plants suffering from potassium deficiency or plants receiving excessive amounts of nitrogen are more prone to mite infestations. Also, plants suffering from drought stress are more likely to be infested and are less able to tolerate mite injury.

Another way to avoid mite infestations is to quarantine and inspect your plants prior to introducing them to your home or garden. The twospotted spider mite is often introduced on infested bedding and house plants. When purchasing new plants, especially house plants, inspect the leaves for mite activity. New house plants should be quarantined from your other plants until you are sure that no mites are present.

If you do have a mite infested plant, one of the easiest control options is to simply knock the mites off using a forceful jet of water from a hose (syringing). This works best when the water is directed to the undersides of the leaves, where most mites occur. A regular syringing can keep spider mites under control on smaller ornamental plants. This technique also helps to conserve natural predators.

If syringing and natural predators don't get rid of the mites, then the next step would be to spray with insecticidal soap or horticultural oil. Remember that soaps and oils must contact the mite in order to work. Therefore, thorough coverage of the plant is necessary for good control. Be sure to read and follow label directions, even on these "soft" pesticides.

Since spider mites are not insects, they are usually not killed by regular insecticides. If you must use a chemical pesticide, be sure to check the pesticide label to see if mites are controlled. Although there are a number of effective miticides available for use in commercial greenhouse and nursery situations, relatively few effective chemical options are available to the homeowner. Contact your local Extension Office for recommendations.

Tip of the Week: You don't have to look too hard to see that lovebug season is upon us again. Lovebugs are actually a type of fly. They're quite seasonal with an emergence usually in May and then again in September. Chemical control of the lovebug is ineffective because this insect is widespread and continually drifts onto highways from adjacent areas.

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